

IN THE CLAIMS:

1. – 77. (Canceled)

78. (Currently amended) A method of inhibiting mucus ~~secretion~~ hypersecretion by a mucus-secreting epithelial cell contained within the airway ~~mucous membranes or gastrointestinal mucous members~~ of a mammalian subject comprising administration to said cell a mucus-inhibitory amount of a ~~peptide~~ myristoylated peptide fragment of the N-terminal region of the MARCKS protein consisting of from about 10 to about 50 contiguous amino acids beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4 ~~sequence of SEQ ID NO:3~~, wherein said peptide fragment inhibits MARCKS protein-related mucus hypersecretion, and whereby mucus hypersecretion by said cell is reduced compared to that which would occur in the absence of said peptide.

79. (Previously presented) The method according to claim 78, wherein said administration is to the airways of said mammalian subject.

80. (Previously presented) The method according to claim 79, further comprising removal of retained mucus secretions from the airways of said mammalian subject prior to administering said peptide.

81. (Canceled)

82. (Previously presented) The method according to claim 79, wherein said administration is by inhalation.

83. (Canceled)

84. (Canceled)

85. (Currently amended) A method of inhibiting mucus ~~secretion~~ hypersecretion in the airways of a subject in need of such treatment comprising administration to the airways of said subject a mucus-inhibitory amount of a ~~peptide~~ myristoylated peptide fragment of the N-terminal region of the MARCKS protein consisting of from about 10 to about 50 contiguous amino acids beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4 ~~sequence of SEQ ID NO:3~~, wherein said ~~compound~~ peptide fragment inhibits MARCKS protein-related mucus hypersecretion, and whereby mucus hypersecretion in said airways is reduced compared to that which would occur in the absence of said peptide.

86. (Currently amended) The method according to claim 85, wherein said subject suffers from a disease ~~or condition~~ in which airway mucus hypersecretion is a dominant clinical finding.

87. (Currently amended) The method according to claim 86, wherein said disease ~~or condition~~ is ~~selected from the group consisting of a bronchitis, asthma, cystic fibrosis, chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, pneumonia, influenza, rhinitis and the common cold~~ a pulmonary or respiratory disease associated with mucus hypersecretion.

88. (Previously presented) The method according to claim 85, further comprising removal of retained mucus secretions from the airways of said mammalian subject prior to administering said peptide.

89. (Previously presented) The method according to claim 85, wherein said administration is by inhalation.

90. (Canceled)

91. (Currently amended) A pharmaceutical formulation comprising a ~~peptide~~ myristoylated peptide fragment of the N-terminal region of the MARCKS protein consisting of

from about 10 to about 50 contiguous amino acids beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO: 4 ~~sequence of SEQ ID NO: 3~~, wherein said peptide fragment inhibits MARCKS protein-related mucus hypersecretion, and a pharmaceutically acceptable carrier.

92. (Previously presented) The pharmaceutical formulation according to claim 91, wherein said formulation is aerosolized.

93. (Previously presented) The pharmaceutical formulation according to claim 91, wherein said peptide is contained within liposomes.

94. (Canceled)

95. (Currently amended) A method of inhibiting mucus ~~secretion~~ hypersecretion by a mucus-secreting epithelial cell contained within the airway ~~mucous membranes or gastrointestinal mucous membranes~~ of a mammalian subject comprising administration to said cell a mucus-inhibitory amount of MANS peptide, wherein said MANS peptide inhibits MARCKS protein-related mucus hypersecretion, and whereby mucus hypersecretion by said cell is reduced compared to that which would occur in the absence of said MANS peptide.

96. (Previously presented) The method according to claim 95, wherein said administration is to the airways of said mammalian subject.

97. (Previously presented) The method according to claim 96, further comprising removal of retained mucus secretions from the airways of said mammalian subject prior to administering said peptide.

98. (Canceled)

99. (Previously presented) The method according to claim 95, wherein said administration is by inhalation.

100. (Currently amended) The method according to claim 95, wherein said MANS peptide consists of a ~~peptide of SEQ ID NO:1 or a myristolated~~ myristoylated peptide of SEQ ID NO:1.

101. (Currently amended) A method of inhibiting mucus ~~secretion~~ hypersecretion in the airways of a subject in need of such treatment comprising administration to the airways of said subject a mucus-inhibitory amount of a MANS peptide, wherein said MANS peptide inhibits MARCKS protein-related mucus hypersecretion, and whereby mucus hypersecretion in said airways is reduced compared to that which would occur in the absence of said MANS peptide.

102. (Currently amended) The method according to claim 101, wherein said subject suffers from a disease ~~or condition~~ in which airway mucus hypersecretion is a dominant clinical finding.

103. (Currently amended) The method according to claim 102, wherein said disease ~~or condition~~ is selected from the group consisting of a bronchitis, asthma, cystic fibrosis, chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, pneumonia, influenza, rhinitis and the common cold a pulmonary or respiratory disease associated with mucus hypersecretion.

104. (Previously presented) The method according to claim 101, further comprising removal of retained mucus secretions from the airways of said mammalian subject prior to administering said peptide.

105. (Previously presented) The method according to claim 101, wherein said administration is by inhalation.

106. (Currently amended) The method according to claim 101, wherein said MANS peptide consists of a ~~peptide of SEQ ID NO:1 or a myristolated~~ myristoylated peptide of SEQ ID NO:1.

107. (Previously presented) A pharmaceutical formulation comprising a MANS peptide, wherein said MANS peptide inhibits MARCKS protein-related mucus hypersecretion, and a pharmaceutically acceptable carrier.

108. (Previously presented) The pharmaceutical formulation according to claim 107, wherein said formulation is aerosolized.

109. (Previously presented) The pharmaceutical formulation according to claim 107, wherein said MANS peptide is contained within liposomes.

110. (Currently amended) The pharmaceutical formulation according to claim 107, wherein said MANS peptide consists of a ~~peptide of SEQ ID NO:1 or a myristolated~~ myristoylated peptide of SEQ ID NO:1.

111. (New) The method according to claim 87, wherein said disease is selected from the group consisting of bronchitis, asthma, cystic fibrosis, chronic obstructive pulmonary disease, bronchiectasis, emphysema, pneumonia, influenza, rhinitis and the common cold.

112. (New) The method according to claim 103, wherein said disease is selected from the group consisting of bronchitis, asthma, cystic fibrosis, chronic obstructive pulmonary disease, bronchiectasis, emphysema, pneumonia, influenza, rhinitis and the common cold.

113. (New) The method according to claim 78, wherein said myristoylated peptide fragment of the N-terminal region of the MARCKS protein consists of from about 10 to about 20 contiguous amino acids beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.

114. (New) The method according to claim 85, wherein said myristoylated peptide fragment of the N-terminal region of the MARCKS protein consists of from about 10 to about 20 contiguous amino acids beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.

115. (New) The pharmaceutical formulation according to claim 91, wherein said myristoylated peptide fragment of the N-terminal region of the MARCKS protein consists of from about 10 to about 20 contiguous amino acids beginning from the N-terminal glycine residue of the MARCKS protein-as shown in SEQ ID NO:4.